

## Technical data sheet

### Mobile 2D-code reader

Part no.: 50142439  
IT 1950g SR-2-USB-KIT-R



For illustration purposes only

#### Contents

- Set consists of
- Technical data
- Electrical connection
- Diagrams
- Operation and display
- Notes
- Accessories



## Set consists of

|                                                                                                                                                                        | Quantity | Part no. | Designation     | Article               | Description                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|-----------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| <br> | 1        | 50142437 | IT 1950g SR-2-R | Mobile 2D-code reader |                                                                                                                                              |
|                                                                                                                                                                        | 1        | 50114521 | KB USB-1 IT190x | Interconnection cable | Suitable for interface: USB<br>Connection 1: USB<br>Connection 2: RJ41<br>Shielded: Yes<br>Cable length: 3,000 mm<br>Sheathing material: PVC |

## Technical data

### Basic data

|          |           |
|----------|-----------|
| Series   | IT19xx    |
| Contains | USB cable |

### Read data

|                      |                             |
|----------------------|-----------------------------|
| Code types, readable | 2/5 Interleaved             |
|                      | Aztec                       |
|                      | Codabar                     |
|                      | Code 128                    |
|                      | Code 39                     |
|                      | Code 93                     |
|                      | Composite Codes             |
|                      | Data Matrix Code            |
|                      | DotCode                     |
|                      | EAN 128                     |
|                      | EAN 8/13                    |
|                      | EAN Addendum                |
|                      | GS1 Databar                 |
|                      | GS1 Databar Expanded        |
|                      | GS1 Databar Limited         |
|                      | GS1 Databar Omnidirectional |
|                      | GS1 Databar Stacked         |
|                      | GS1 Databar Truncated       |
|                      | Maxicode                    |
|                      | Micro PDF                   |
|                      | Micro QR                    |
|                      | Others on request           |
|                      | PDF417                      |
|                      | QR code                     |
|                      | UPC                         |

### Optical data

|                               |              |
|-------------------------------|--------------|
| Reading distance              | 0 ... 822 mm |
| Camera resolution, horizontal | 1,280 px     |
| Camera resolution, vertical   | 800 px       |

### Electrical data

|                         |                 |
|-------------------------|-----------------|
| <b>Performance data</b> |                 |
| Supply voltage $U_B$    | 4 ... 5.5 V, DC |
| Power consumption, max. | 2.5 W           |

### Interface

|      |                   |
|------|-------------------|
| Type | PS/2, RS 232, USB |
|------|-------------------|

#### RS 232

|          |         |
|----------|---------|
| Function | Process |
|----------|---------|

#### USB

|          |         |
|----------|---------|
| Function | Process |
|----------|---------|

### Connection

#### Connection 1

|                    |      |
|--------------------|------|
| Type of connection | RJ41 |
|--------------------|------|

### Mechanical data

|                       |                        |
|-----------------------|------------------------|
| Dimension (W x H x L) | 70 mm x 80 mm x 160 mm |
| Housing material      | Plastic                |
| Plastic housing       | UL 94-V0               |
| Net weight            | 160 g                  |

### Environmental data

|                                    |                |
|------------------------------------|----------------|
| Ambient temperature, operation     | 0 ... 50 °C    |
| Ambient temperature, storage       | -40 ... 70 °C  |
| Relative humidity (non-condensing) | 0 ... 95 %     |
| Drop height                        | 1.8 m          |
| Measurements relative to           | Concrete floor |

### Certifications

|                      |       |
|----------------------|-------|
| Degree of protection | IP 41 |
|----------------------|-------|

Technical data

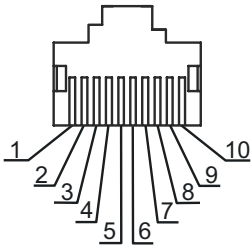
|                       |          |
|-----------------------|----------|
| Customs tariff number | 84719000 |
| ECLASS 5.1.4          | 27280103 |
| ECLASS 8.0            | 27280103 |
| ECLASS 9.0            | 27280103 |
| ECLASS 10.0           | 27280103 |
| ECLASS 11.0           | 27280103 |
| ECLASS 12.0           | 27280103 |
| ECLASS 13.0           | 27280103 |
| ECLASS 14.0           | 27280103 |
| ECLASS 15.0           | 27280103 |
| ETIM 5.0              | EC002550 |
| ETIM 6.0              | EC002999 |
| ETIM 7.0              | EC002999 |
| ETIM 8.0              | EC002999 |
| ETIM 9.0              | EC002999 |
| ETIM 10.0             | EC002999 |

Electrical connection

Connection 1

|                    |                         |
|--------------------|-------------------------|
| Function           | Configuration interface |
| Type of connection | RJ41                    |

| Pin | Pin assignment           |
|-----|--------------------------|
| 1   | Shield                   |
| 2   | Cable ID                 |
| 3   | GND                      |
| 4   | TxD RS 232 / n.c. USB    |
| 5   | RxD RS 232 / n.c. USB    |
| 6   | CTS RS 232 / n.c. USB    |
| 7   | +5 V DC                  |
| 8   | RTS RS 232 / n.c. USB    |
| 9   | n.c. RS 232 / Data + USB |
| 10  | n.c. RS 232 / Data - USB |



## Diagrams

### Typical reading behavior

|          | A [mil] | B [mm] | C [mm] | D [mm] |
|----------|---------|--------|--------|--------|
| Code 39  | 3       | 0,076  | 56     | 132    |
|          | 5       | 0,127  | 28     | 242    |
|          | 10      | 0,254  | 0      | 443    |
|          | 20      | 0,508  | 4      | 822    |
| UPC      | 13      | 0,330  | 0      | 490    |
| Code 128 | 7,5     | 0,191  | 25     | 295    |
|          | 15      | 0,381  | 0      | 543    |
| PDF 417  | 5       | 0,127  | 54     | 160    |
|          | 6,7     | 0,170  | 34     | 220    |
| DM       | 7,5     | 0,191  | 49     | 172    |
|          | 10      | 0,254  | 29     | 245    |
| QR       | 10      | 0,254  | 35     | 250    |
|          | 20      | 0,508  | 0      | 438    |

A Module size [mil]  
 B Modulus size [mm]  
 C From [mm]

D To [mm]  
**ATTENTION** Please observe the note below  
 ! regarding the reading distances.

## Operation and display

| LED | Display            | Meaning            |
|-----|--------------------|--------------------|
| 1   | Green, 1x flashing | Reading successful |
|     | Red                | No reading result  |

## Notes



**Observe intended use!**



- ⚠ This product is not a safety sensor and is not intended as personnel protection.
- ⚠ The product may only be put into operation by competent persons.
- ⚠ Only use the product in accordance with its intended use.

## Accessories

### Connection technology - Connection unit

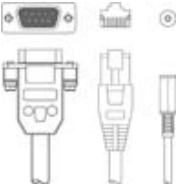
|                                                                                    | Part no. | Designation              | Article                 | Description                                                                                                                                               |
|------------------------------------------------------------------------------------|----------|--------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | 50112891 | MA 248i Profinet Gateway | Modular connection unit | Supply voltage: 18 ... 30 V<br>Current consumption, max.: 300 mA<br>Interface: PROFINET, RS 232<br>Connections: 6 Piece(s)<br>Degree of protection: IP 65 |

## Accessories

### Connection technology - Interconnection cables

|                                                                                  | Part no. | Designation   | Article               | Description                                                                                                                                                                       |
|----------------------------------------------------------------------------------|----------|---------------|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | 50113397 | KB JST-HS-300 | Interconnection cable | Suitable for interface: RS 232<br>Connection 1: JST ZHR connector<br>Connection 2: Sub-D, Axial, Male, 9 -pin<br>Shielded: Yes<br>Cable length: 300 mm<br>Sheathing material: PUR |

### Connection technology - Y distribution cables

|                                                                                  | Part no. | Designation     | Article               | Description                                                                                                                                                                                                                                |
|----------------------------------------------------------------------------------|----------|-----------------|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | 50114517 | KB 232-1 IT190x | Interconnection cable | Suitable for interface: RS 232, TTL<br>Connection 1: RJ41<br>Connection 2: Sub-D, Axial, Female, 9 -pin<br>Connection 3: Connector, Pluggable, Axial, Female, 2 -pin<br>Shielded: Yes<br>Cable length: 3,000 mm<br>Sheathing material: PVC |

### Mounting technology - Other

|                                                                                    | Part no. | Designation          | Article    | Description                                                                                                                                       |
|------------------------------------------------------------------------------------|----------|----------------------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
|  | 50115739 | BT Wallholder IT190x | Wall mount | Design of mounting device: Wall mounting<br>Fastening, at system: Mounting thread<br>Mounting bracket, at device: insertable<br>Material: Plastic |

#### Note



A list with all available accessories can be found on the Leuze website in the Download tab of the article detailed page.